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PUBLIC UTILITIES
COMMISSION

BEFORE THE PUBLIC UTILITIES COMMISSION
OF THE STATE OF HAWAII

-----In the Matter of-----) DOCKET NO. 2008-0273
)
PUBLIC UTILITIES COMMISSION)
)
Instituting a Proceeding to)
Investigate the Implementation of)
Feed-in Tariffs.)
)

THE DEPARTMENT OF BUSINESS, ECONOMIC DEVELOPMENT, AND TOURISM'S
FINAL STATEMENT OF POSITION INCLUDING PROPOSALS FOR FEED-IN
TARIFF DESIGNS, POLICIES, and PRICING METHODS

AND

CERTIFICATE OF SERVICE

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**THE DEPARTMENT OF BUSINESS, ECONOMIC DEVELOPMENT, AND TOURISM'S
FINAL STATEMENT OF POSITION INCLUDING PROPOSALS FOR FEED-IN
TARIFF DESIGNS, POLICIES, and PRICING METHODS**

The Department of Business, Economic Development, and Tourism ("DBEDT"), by and through its Director ("Director") in his capacity as the Energy Resources Coordinator ("ERC"), through the undersigned Deputy Attorney General, hereby submits to the Hawaii Public Utilities Commission ("Commission" or "PUC") its Final Statement of Position in the instant docket including proposals for feed-in tariff designs, policies, and pricing methods.

Background

On October 24, 2008, the PUC initiated the instant docket, Docket No. 2008-0273, to examine the issues related to the implementation of feed-in tariffs in the service territories

served by the Hawaiian Electric Companies ("HECO Companies"). The PUC designated the HECO Companies and the Consumer Advocate as parties to the docket since they were signatories to the Energy Agreement ("Agreement") entered into between the State and the HECO Companies on October 20, 2008, which was cited as the basis for the PUC's initiation of this docket. On November 28, 2008, the PUC issued its Order granting intervenor status to eighteen (18) parties including DBEDT¹.

On December 11, 2008, the PUC issued a Scoping Paper titled "Feed-in Tariffs: Best Design Focusing Hawaii's Investigation" prepared by the National Regulatory Research Institute (NRRI). The PUC Scoping Paper identified several legal and non-legal issues relating to feed-in tariffs which the Parties were required to respond to by January 12, 2009 and January 26, 2009, respectively. On December 23, 2008, the HECO Companies and the CA filed their joint proposal on feed-in tariffs design ("HECO/CA Joint FiTs Proposal") pursuant to the PUC's Order initiating the investigation.

¹ The intervenors in the docket include DBEDT; City and County of Honolulu; the County of Hawaii; Semptra Generation; Hawaii Holdings LLC, doing business as First Wind Hawaii (First Wind); Haiku Design and Analysis (HDA); Hawaii Renewable Energy Alliance (HREA); SOPOGY Inc.; Life of the Land (LOL); Alexander & Baldwin Inc. through its division, Hawaiian Commercial & Sugar Company (HC&S); Clean Energy Maui LLC; Tawhiri Power LLC; Hawaii Bioenergy LLC (HBE); Maui Land & Pineapple Company, Inc. (MLP); Hawaii Solar Energy Association (HSEA); The Solar Alliance; and Zero Emissions Leasing LLC.

ISSUES

On January 20, 2009, the PUC issued its Order setting forth the issues, procedures, and schedule to govern the proceeding, adopting and modifying sections from the proposed stipulated procedural orders² filed by the Parties. The issues to be addressed in the docket as set forth in the PUC's Order include the following:

A. Purpose of project-based feed-in tariffs (PBFiTs):

- 1) What, if any, purpose do PBFiTs play in meeting Hawaii's clean energy and energy independence goals, given Hawaii's existing renewable energy purchase requirements by utilities?
- 2) What are the potential benefits and adverse consequences of PBFiTs for the utilities, ratepayers and the State of Hawaii;
- 3) Why is or is not the PBFiT the superior method to meet Hawaii's clean energy and energy independence goals?

B. Legal Issues:

- 4) What, if any, modifications are prudent or necessary to existing federal or state laws, rules, regulations

² On December 22, 2008, a proposed Stipulated Procedural Order (SPO) was submitted by the HECO Companies, CA, DBEDT, City & County of Honolulu, County of Hawaii, Semptra Generation, and First Wind. HDA also filed its own proposed SPO, and HREA, SOPOGY, LOL, HC&S, Clean Energy Maui and Tawhiri Power filed joinders to HDA's SPO.

or other requirements to remove any barriers or to facilitate the implementation of a feed-in tariff not based on avoided costs?

- 5) What evidence must the Commission consider in establishing a feed-in tariff and has that evidence been presented in this investigation?

C. Role of Other Methodologies:

- 6) What role do other methodologies for the utility to acquire renewable energy play with and without a PBFiT, including but not limited to power purchase contracts, competitive bidding, avoided cost offerings and net energy metering?

D. Best design for a PBFiT or alternative method:

- 7) What is the best design, including the cost basis, for PBFiTs or other alternative feed-in tariffs to accelerate and increase the development of Hawaii's renewable energy resources and their integration in the utility system?

E. Eligibility Requirements:

- 8) What renewable energy projects should be eligible for which renewable electricity purchase methods or individual tariffs and when?

F. Analysis of the cost to consumers and appropriateness of caps:

- 9) What is the cost to consumers and others of the proposed feed-in tariffs?
- 10) Should the Commission impose caps based upon these financial effects, technical limitations or other reasons on the total amount purchased through any mechanism or tariff?

G. Procedural Issues:

- 11) What process should the Commission implement for evaluating, determining and updating renewable energy purchased power mechanisms or tariffs?
- 12) What are the administrative impacts to the Commission and the parties of the proposed approach?

DBEDT's FINAL STATEMENT OF POSITION

The PUC's Order to examine the implementation of feed-in tariffs in the HECO Companies' service territories cited the Energy Agreement ("Agreement") entered into between the State of Hawaii and the HECO Companies on October 20, 2008 under the auspices of the Hawaii Clean Energy Initiative ("HCEI").

HCEI is a long-term partnership between the State of Hawaii and the U.S. Department of Energy ("USDOE") launched in January 2008, with the goal of meeting at least 70% of Hawaii's energy

needs with clean and indigenous renewable energy resources by 2030, providing long-term economic and environmental benefits to the people of Hawaii, including price stability (and ultimately a lower energy cost than would be incurred through continued dependence on imported fossil fuels), energy security, economic growth and diversification.

The Energy Agreement between the State and the HECO Companies is a commitment to accelerate the addition of new renewable energy resources and technology in the HECO Companies' generation portfolio, to promote greater energy efficiency and demand-side load management programs, as well as to promote and facilitate customer-sited and third-party owned renewable energy generation to help achieve the HCEI clean energy and energy independence goals. The HECO Companies made significant and commendable commitments under the Agreement to help provide a pathway to Hawaii's clean energy transformation through increased use of clean and indigenous renewable resources in power generation. These significant commitments include but are not limited to the following:

- 1) Integrating as much as 1,640 MW of renewable resources generation to the HECO Companies' grid by the year 2030, which includes power purchases of new renewable generation through power purchase agreements (788.9 MW), utility projects using biofuels (333.0 MW), PV systems

- purchased through FiTs (218.0 MW), utilities' PV Host Program (86.0 MW), and net energy metered customer-sited generation (213 MW);
- 2) Increasing and achieving higher renewable portfolio standards of 15% by 2015 based entirely on renewable resources-based power generation, 25% by 2020, and 40% by 2030;
 - 3) Commitment to not build new additional fossil-fuel based generation units greater than 2 MW; and
 - 4) Commitment to support the implementation and achievement of Energy Efficiency Portfolio Standards with a target goal of 30% by 2030.

To transition the HECO Companies to this new paradigm as well as to break down the barriers to this transition, the Agreement provided a number of significant utility incentives and regulatory mechanisms, subject to PUC approval, including but not limited to the following:

- 1) Implementation of a decoupling mechanism;
- 2) Timely recovery of costs incurred by the HECO Companies related to the implementation of clean renewable energy commitments through a Clean Energy Infrastructure Surcharge (CEIS);
- 3) Automatic recovery of the HECO Companies' purchased power costs including the purchased capacity costs;

- 4) Allowing the utilities to continue to recover their fuel costs through the current energy cost adjustment clause (ECAC);
- 5) Supporting, in principle, the ratebasing of 10% of the HECO Companies' total renewable power purchases through FiTs; and
- 6) Suspension of the intra-state wheeling docket for 12 months to enable the utilities to focus their efforts on achieving their commitments under the Agreement.

The Agreement recognized that a financially sound electric utility is vital to achieving Hawaii's energy transformation, and the aforementioned utility incentives, subject to Commission approval, are aimed at providing opportunities to the HECO Companies to earn fair rates of return and maintain their financial viability, thereby removing the financial barriers to their ability and interest in achieving and fulfilling their commitments under the Agreement.

One major regulatory mechanism included in the Agreement that is aimed at promoting and accelerating the addition of new renewable energy resources in the HECO Companies' generation portfolio is the implementation of feed-in tariffs, subject to PUC approval.

Feed-in tariffs (FiTs) are the offering of a standardized fixed-price contract over a specified contract term with

specified conditions to eligible renewable energy generators. A feed-in tariff is generally offered by a utility and provides a set of standardized purchase power rates that are often differentiated based on resource or technology type, resource quality, project size, or location.

DBEDT's POSITION ON THE ISSUES

1. Purpose of PBFiTs in meeting Hawaii's clean energy and energy independence goals:

DBEDT believes that best designed feed-in tariffs are an effective tool in reducing Hawaii's dependence on imported fossil fuels by promoting and encouraging the development of renewable resource-based electricity generation. Utility procurement of renewable resources through FiTs is a critical mechanism in achieving Hawaii's clean energy and energy independence goals. As agreed to by the State and the HECO Companies in the Energy Agreement, "FiTs are beneficial to the development of renewable energy as they provide predictability and certainty with respect to the future prices to be paid for renewable energy and how much of such energy the utility will acquire."³

Feed-in tariffs are designed to encourage increased development of renewable energy generation by providing certainty and stability to the purchased power rates (and

³Energy Agreement, October 20, 2008, item 7 at 16.

therefore to the developer's revenue stream), as well as a more transparent and streamlined utility procurement and interconnection process. Under the current procurement rules, a renewable resource producer must compete in the utility's bid process and obtain PUC approval, which normally takes a considerable time under a drawn-out procedure with an uncertain outcome that may represent an unacceptable economic hurdle to the renewable resource producer. More importantly, the current bid process only applies to renewable generators with a minimum capacity of 5 MW for Oahu (2.72 MW for MECO and HELCO), and there are no clear procurement rules for the smaller renewable generators that are below this threshold size required under the utility's current competitive bidding framework. Furthermore, the utility procurement of renewable generation that meets the minimum capacity size thresholds without a utility-issued RFP will require a PUC-approved waiver from the competitive bidding framework, for which only the utility can apply or petition.

Feed-in tariffs offer a more effective method for utility procurement of renewable resources. Best designed feed-in tariffs provide greater clarity, transparency and certainty, and eliminate the need for a long contracting process which ultimately reduces the developer's and the utility's costs, benefiting the ratepayers in the long-run. Feed-in tariffs help create a market that increases RPS-eligible energy resources and

projects. Additionally, feed-in tariffs have inherent flexibility such that they can be designed to encourage the development of specific forms of renewable resource generation, or renewable generation at specific locations where it could be most valuable to the utility (i.e., areas that are not transmission constrained).

DBEDT therefore believes that best designed feed-in tariffs are an effective tool in achieving Hawaii's energy independence and its attendant economic and environmental benefits by increasing nonfossil-based electricity generation.

2. Potential benefits and adverse consequences of PBFiTs:

DBEDT believes that promoting and accelerating the increased use and development of renewable resources-based power generation through FiTs will provide significant economic and environmental benefits and opportunities.

The potential benefits of feed-in tariffs for the utilities, ratepayers and the State of Hawaii include all the benefits and opportunities that come with Hawaii's reduced dependence on imported fossil fuels, including energy security and independence, reduced exposure to fuel oil price volatility, stable and lower energy costs in the future, reduced risks resulting from increased diversification of the generation portfolio, the attendant economic benefits of reducing fuel oil

imports (including increased job and tax base, economic growth and diversification), and reduced greenhouse gas emissions and the attendant negative impact on climate change, global warming and Hawaii's environment. Best designed FiTs could also lead to the inflow of capital investments into Hawaii with all the economic benefits that entails.

The potential adverse impact of FiTs could be the immediate short-term increases in energy costs. As agreed to between the State and the HECO Companies in the Energy Agreement, "the benefits to Hawaii from using a FiT to accelerate renewable energy development exceed the potential incremental costs paid to the renewable developer in the short-term."⁴

3. Whether PBFiT is or is not a superior methodology to meet Hawaii's clean energy and energy independence goals:

DBEDT believes that best designed feed-in tariffs offer a superior alternative and complementary method to the current utility procurement methods.

The current methodologies for the HECO Companies to acquire renewable power generation include Schedule Q, Net Energy Metering, competitive bidding, purchased power contracts, and through utility-owned projects, which are described in more detail below. Except for Net Energy Metering, these methods are

⁴Energy Agreement, October 20, 2008, item #7 at 16.

intended primarily for independent power producers to sell power to the utilities. Net Energy Metering is primarily intended to promote customer self-generation rather than to sell power to the utilities.

(1) Schedule Q applies to power purchased from small qualifying facilities with capacity of 100 kW or less and with the purchased power rates based on the utility's avoided cost. It was first implemented in June 1982 as a result of the Public Utility Regulatory Policies Act ("PURPA") passed in 1978 by the U.S. Congress as part of the National Energy Act. PURPA was aimed at promoting greater use of renewable energy. This law created a market for non-utility electric power producers (NUGs) using non-fossil fuels, and for cogeneration, and required the electric utilities to buy power from these producers at the "avoided cost" rate, which was the cost the electric utility would incur were it to generate or purchase from another source.

DBEDT believes that the design of the feed-in tariffs should replace the HECO Companies' future procurements from small qualifying facilities currently acquired through Schedule Q. Additionally, the existing Schedule Q contracts should be provided the option to transition over to FiTs. As agreed to between the State and the HECO Companies in the Energy Agreement, the "HECO Companies will make a request of all existing independent power producers in which purchased power

agreements are based on fossil fuel prices to negotiate those contracts to de-link their energy payment rates from oil costs and provide ratepayers with stable, long-term and predictably priced contracts."⁵ DBEDT believes that feed-in tariffs offer an effective and efficient mechanism to achieve this commitment between the parties in the Energy Agreement.

(2) Net Energy Metering (NEM), which is mandated under part VI of chapter 269, Hawaii Revised Statutes ("HRS"), is aimed at encouraging and promoting customer self-generation. Hawaii's Net Energy Metering law was passed in 2001. The law is aimed at encouraging and promoting customer-sited renewable energy generation and technologies and help Hawaii's transition to a clean energy future. The law is intended primarily to offset part or all of the customer's own electrical requirements, rather than to promote power sales to the utility. NEM provides an effective incentive for the rapid development of customer-sited renewable resource generation as evident by the significant increases in the number of net energy metered customers across all islands since 2001 when NEM first became law. As of 2008, the HECO Companies have a total of 810 net energy metered customers (an increase of 805 from program inception in 2001) providing a total capacity of 6.0 MW (or 5.97 MW increase from 2001). Kauai Island Utility Cooperative (KIUC)

⁵ Energy Agreement, October 20, 2008, item # 6 at 16.

has 76 net metered customers as of 2008, with a total combined capacity of 0.97 MW.

DBEDT's position is that the net energy metering statute should continue to apply to current and future net energy metered customers with respect to kilowatt-hours produced by the customer-generators that offset part or all of the customer's own electrical requirements, and the net energy metered customer may sell through the feed-in tariffs any excess kilowatt-hours that remain unused. Section 269-108, HRS, provides that net energy metered customers will not be compensated for annual excess kilowatt-hours produced by the customer generator that remain unused by the customer unless the electric utility enters into a purchase agreement for those excess kilowatt-hours. DBEDT believes that FiTs offer a streamlined and transparent mechanism that can be employed by the utility to compensate those excess kilowatt-hours rather than through long drawn-out contract negotiations with uncertain outcomes.

DBEDT's position is consistent with the provision of the Energy Agreement which "support[s] customer energy payment options through modification of Hawaii's net metering option to include provisions for the sale of excess energy produced by the

customer's net metered system on an annual basis and payment of such energy at the feed-in tariff rates."⁶

(3) The competitive bidding procurement method was first mandated by the PUC in December 2006. This method applies to utility procurement of renewable resources with a capacity of at least 5 MW for HECO (2.72 MW for HELCO and MECO). Since its inception, HECO has issued only one RFP under this bid process. HELCO and MECO have not issued any RFPs for renewable resources under this process. Furthermore, the competitive bid process does not mandate any timeline as to the length of time to complete the process from the date of issue of an RFP to the completion and signing of a contract with the winning bidder(s).

DBEDT believes that feed-in tariffs offer a more transparent and efficient means for utility procurement of relatively larger renewable generation. Therefore DBEDT recommends that FiTs should be open to larger projects, especially those that use proven, commercially available, and cost-effective renewable technologies. Special terms and conditions may be deemed necessary for system protection and interconnection, which is entirely appropriate. FiTs could especially supplement the utility's competitive bidding framework for those renewable generation projects that meet the minimum capacity size thresholds for the bid process but for

⁶ Energy Agreement, October 20, 2008, item #7 at 12.

which there is no utility-issued RFP. For instance, under the Energy Agreement the HECO Companies committed to pursue, integrate, and bring on-line several specific project proposals, subject to PUC approval. At the time the Agreement was signed, contract negotiations with several of these projects were in progress, being either grandfathered in or having received a PUC waiver from the bid process. To date, three of these projects, with a total combined capacity of approximately 35 MW⁷, have been denied extensions of time to complete and file their term sheets, effectively terminating contract negotiations. DBEDT believes that FiTs would offer an effective, efficient, and transparent mechanism for the utilities to pursue, integrate, and bring these and similar projects on-line as desired by the Parties in the Agreement.

(4) Purchased power contracts are used in the procurement of renewable resources less than the minimum capacity threshold size required under competitive bidding. There are no clearly defined rules or contracting process for this procurement method, hence the process is completely under the utility's control: no PUC mandated rules, no framework, and no process beyond PUC approval of the purchase power contract.

⁷ Energy Agreement, October 20, 2008, projects identified at 7-8 (Pulehu Biomass (6 MW), Hamakua Biomass (25 MW), and Na Makani (4.5 MW)).

DBEDT believes that feed-in tariffs will fill a critical policy gap for projects below the MW size threshold for the competitive bidding framework. These relatively smaller renewable power producers could provide potential distributed benefits and resource diversity to the grid and FiTs could effectively promote this market. FiTs should extend to projects with capacity sizes that are below the minimum threshold size limits under the bid process.

(5) Utility-owned projects provide another method for the utility to increase its renewable generation portfolio. Except for the small HELCO-owned wind farm and hydro power, DBEDT is not aware of any other existing utility-owned renewable power generation in the HECO Companies' service territories.

Under the Agreement, the parties committed to support the HECO Companies' plan to test the technical feasibility of converting their existing fossil fuel-based generation units to use bio-fuels. This conversion to bio-fuels should however take into consideration the availability, viability, and cost-effectiveness of locally-produced bio-fuels in the short- and long-term, or it could simply result in replacing imported fossil fuel with another imported fuel source. DBEDT agrees with most of the parties in this docket, including the HECO Companies, that FiTs should not be extended to utility-owned renewable generation projects.

The non-extension of FiTs to utility-owned projects does not however preclude the utilities from developing their own renewable energy generation systems, the cost of which is includable in their ratebase and recoverable in their rates, subject to PUC approval. It is also important to note that DBEDT also proposes that energy storage and other utility integrating technologies which provide ancillary services should be owned and paid for by the utilities. Alternatively, these firming technologies may also be acquired through FiTs with appropriate prices, terms and conditions designed specifically for grid integration and ancillary services.⁸

Under the Energy Agreement, the HECO Companies committed to implement a PV Host Program that will provide capacity of 86 MW by 2030. The HECO Companies are planning to file the program application for PUC approval by March 31, 2009, pursuant to the Energy Agreement. Based on the program information provided in the Agreement⁹, the PV Host Program provides another option for customer-sited PV systems that is funded by the utility ratepayers. While the details of this program are not yet known at this time, it is uncertain how this program will impact or compare to the HECO/CA's Joint FiTs proposal.

⁸ Energy Agreement, October 20, 2008, at 9. The Agreement indicates that these technologies may be acquired with PPAs.

⁹ Energy Agreement, October 20, 2008, items 8-9 at 12-13.

4. Modifications to federal and state laws, rules, regulations to remove barriers or facilitate implementation of FiTs:

Section 269-27.2, HRS provides that, in the event that the utility and the producer fail to reach an agreement on a rate to supply the utility with nonfossil fuel generated electricity, the PUC's determination of the just and reasonable rate will be limited to a ceiling based on the utility's avoided cost. The same statute also provides the PUC with the statutory guidance that the determination of the just and reasonable rate shall be based on a methodology that removes or significantly reduces the linkage between the price of fossil fuels and the rate for nonfossil fuel generation. This principle is supported by the Agreement¹⁰. DBEDT believes that FiTs could be formulated with this principle in mind, so that the avoided cost ceiling is more flexibly construed, allowing greater leeway for the FiTs design consistent with the policy mandates of the statute to encourage the maintenance or development of nonfossil fueled sources of electrical energy.

5. Evidence for the commission to consider in establishing FiTs:

The evidence or information that the Commission must consider in establishing a feed-in tariff includes the following, without limitation: (1) the resources and/or technologies' actual or estimated costs, (2) information for

¹⁰ Energy Agreement, October 20, 2008, item 6 at 16.

determining reasonable profit, (3) the amounts of renewable resources that can be integrated in the HECO Companies' system and/or the information that can be used to determine such amounts, (4) the types and sizes of renewable resources to include in FiTs, (5) information relating to the utility system to determine the target project size by resource type and other provisions of best designed FiTs such as the "take or pay" provision, (6) information on the utilities' existing purchase power contracts, including all Schedule Q participants, PPAs that are in progress, new project proposals that the HECO Companies have received, net energy metering contracts, and other utility information as may be necessary and useful in determining the reasonable queuing procedure.

6. Role of other methodologies for the utility to acquire renewable energy:

DBEDT's position on the role of the other procurement methods including purchase power contracts, competitive bidding, avoided cost offerings, net energy metering, with and without a PBFiT, is discussed in item 3 above.

7. Best design FiTs to accelerate and increase the development of Hawaii's renewable resources and their integration in the utility system:

DBEDT recommends the following feed-in tariffs best design considerations for promoting and accelerating the addition of new renewable power generation in HECO's service territories:

A. Qualifying Resource Type or Technology

Hawaii's initial feed-in tariffs should be extended to all proven, commercially available and cost-effective RPS-eligible renewable generation resources and technologies which have relatively established operational experience in HECO's service territories, including wind, solar, hydro, geothermal, biomass, and biogas. Future evaluations and revisions to the initial FiTs should aim to include all RPS-eligible generation resources. The inclusion of a broad diversity of proven, commercially available, and cost-effective resources provides the utility the opportunity to build a diverse renewable generation portfolio with its attendant system benefits.

B. Resource or Project Sizes and Caps

Hawaii's initial feed-in tariffs should be extended to renewable generation with capacity size up to 5 MW for Oahu, and up to 3.0 MW for HELCO and MECO, depending on the resource type and technology. For certain resources (such as biomass, CSP, or geothermal) which provide firm power, higher project sizes than

the above limits may be appropriate and should be considered by the Commission.

DBEDT's position on the project sizes is consistent with and supportive of the intent of the Energy Agreement to help achieve the HCEI goal of transforming Hawaii to a 70% renewable energy-based economy by 2030, by promoting and accelerating the increased use and development of renewable-based power generation. The HECO/CA's joint proposal to limit the project sizes to a maximum of 500 kilowatts (kW) is not reflective of utility-scale project sizes that are designed to sell renewable power to the utility, and DBEDT is uncertain as to how it supports the intent of the Agreement or of supporting the HCEI goal of promoting and accelerating the use and development of renewable resources, a major basis of the Agreement. The HECO/CA's joint FiTs proposal is designed mainly to replace the net energy metering program which, as noted above, is an effective mechanism in promoting customer-sited renewable generation systems.

The other Parties'¹¹ proposed tariff filed in their Opening Statements of Position indicated project sizes of up to 20 MW for most resource types, except for hydro for which a project size greater than 50 MW was indicated. These project sizes

¹¹ The following Parties provided their proposed FiTs tariffs in their opening SOP: SOPOGY, HC&S, The Solar Alliance, HSEA, Clean Energy Maui LLC, Zero Emissions Leasing LLC, and Blue Planet.

merit consideration by the PUC in determining the future updates of the initial FiTs, especially as the utility grid systems are enhanced and upgraded as determined through the Clean Energy Scenario Planning (CESP) to help integrate renewable resources in the system as agreed to in the Energy Agreement.¹²

C. Pricing Methods

The FiTs rates should be cost-based and differentiated by technology or resource type, resource quality (i.e., firm versus intermittent), and by project size. The determination of the FiTs rates should take into consideration the following factors:

- (a) developer's costs plus a reasonable profit;
- (b) technological improvements over time;
- (c) economies of scale for larger projects;
- (d) estimated capacity factor;
- (e) providing incentives (such as "premium adder" rather than penalty) to reflect the resource value to the system such as location of the project, in-service date of the project, and dispatchability of the resource;
- (f) providing an adjustment mechanism to adjust the FiTs rates over time in a pre-determined fashion to reflect changes in market factors such as, but not limited to,

¹² Energy Agreement, October 20, 2008, items 25-27 at 30-32.

inflation, actual costs and production performance, and market price; and

- (g) developing a FiTs rates adjustment mechanism for when a project or a resource technology is still producing and supplying energy to the system beyond the contract term.

D. Contract Term

During the Parties' settlement discussion meetings scheduled March 18-19, 2009, pursuant to the PUC-approved procedural schedule, the Parties agreed that the appropriate contract term for FiTs design is 20 years. The Parties' settlement agreement on the 20-year contract term was based on the recognition that a major benefit of FiTs is providing certainty and stability to a project's revenue stream which facilitates and reduces the project's financing costs (and project costs) to the ultimate benefit of the ratepayers; that the 20-year term is reflective of the service life of most renewable resources and technologies; and the 20-year term is used in most of the existing FiTs programs that have been proven to be effective and successful.

Additionally, DBEDT recommends that the FiTs design should also include a procedural provision relating to contract termination before the end of the contract term for situations such as non-performance and other similar conditions relating to

the renewable project or technology. DBEDT also recommends a procedural provision (contract extension option) for the continuation of the contract beyond the 20-year contract term when the project or technology is still generating and supplying energy to the utility.

E. Interconnection Standards and Procedure

The HECO Companies currently have a PUC-approved interconnection rule and standards provided in the utility's tariff Rule 14H, designed for distributed generating (DG) facilities operating in parallel with the utility's electric system. These interconnection rules and standards are designed and intended for customer-owned distributed generating facilities such as the net energy metered customers that are installed mainly to offset part or all of the customer's own load. Rule 14H is not designed for utility-scale renewable generating units that are designed to sell power to the utility, and which may interconnect at higher voltage level (i.e., 46 kV sub-transmission) than the utilities' distribution system level. DBEDT proposes that in addition to the HECO Companies' tariff Rule 14H on interconnection rules and standards for small customer-sited distributed generation, the initial FiTs design must include interconnection rules and standards at higher voltage levels, for utility-scale renewable projects that are designed to sell nonfossil-based power to the utility.

FiTs' best design for achieving the HCEI goal requires clear, transparent, and streamlined interconnection rules, standards, and procedures for interconnecting the renewable power generating facility designed to sell power to the utility system. These interconnection rules, standards, and procedures must be published and included in the FiTs' standard contract form. Rather than "one rule fits all", some elements of the FiTs best design interconnection rules, standards, and procedures may differ depending on the project size. These interconnection standards and procedures should be consistent with industry interconnection best practices; they must be clear; they must be transparent; they must be streamlined; and they must be relatively uncomplicated for ease of administration and implementation.

F. Other Essential FiTs Terms and Conditions

Best designed feed-in tariffs must clearly specify the terms and conditions relating to but not limited to the following:

- (a) Queuing procedure between resource types within FiTs, between projects within each resource type included in FiTs, and between FiTs projects and projects under the other procurement methods. Inclusion of a well defined transparent queuing procedure is necessary in the FiTs design given the different procurement

methods, the small system size, and the potential inclusion of caps or target goals on the amount of renewable resources to be procured through FiTs.

- (b) Reservation Charge based on the project size. To minimize the impact on a renewable generation project, DBEDT proposes that the Reservation Charge provision include a maximum amount (i.e., a "not to exceed amount").
- (c) Incremental Projects. DBEDT recommends that the FiTs design include a provision relating to incremental capacity. Incremental capacity could include facility upgrades or expansions to facilities that currently qualify for FiTs. The Commission could also consider extending this incremental capacity for existing renewable energy generation that does not qualify for FiTs (only the incremental capacity would be eligible for the FiT rates.)
- (d) Clear delineation of the interconnection costs responsibility of the utility and the resource project developer should be included in the interconnection standards and procedures. DBEDT proposes that the costs of interconnection requirements on the utility side of the interconnection point should be borne by the utilities, and the costs of the interconnection

requirements on the project side of the interconnection point be borne by the project developer. DBEDT also proposes that energy storage and other utility integrating technologies which provide ancillary services should be owned and paid for by the utilities. This will allow the utilities to grow their transmission and distribution rate base and compensate for the potential lack of growth in their generation plant investment or generation rate base. Alternatively, these firming technologies may also be acquired through FiTs with appropriate prices, terms and conditions designed specifically for grid integration and ancillary services.¹³

- (e) Application, technical review, and approval process. DBEDT proposes that the FiTs design explicitly includes a clear, streamlined, and transparent application, technical review, and approval process that are easy to understand and implement. To the maximum extent possible, DBEDT recommends that the process be made available on-line with a protection provision for submitting project proprietary data and/or information.

¹³ Energy Agreement, October 20, 2008, at 9. The Agreement indicates that these technologies may be acquired with PPAs.

- (f) Data requirements from the renewable project developer, such as but not limited to the actual project cost, and periodic reporting requirements such as but not limited to the actual operation and maintenance costs. Some specific data requirements and periodic reporting requirements suggested by DBEDT are provided in DBEDT's response to the Solar Alliance's information request, SA-IR-9-DBEDT, submitted to the PUC on March 13, 2009, and include without limitation (1) the design, permitting, and construction costs including labor and materials costs; (2) financing or capital cost; (3) land cost or actual cost of site acquisition; (4) interconnection and metering costs incurred by the project developer; and (5) other project costs incurred in developing and constructing the project.
- (g) Provision relating to unit maintenance schedule. DBEDT recommends that the FiTs design include a maintenance schedule provision specifying where necessary such terms as the maintenance frequency and duration, and a coordinated scheduling provision that would avoid the potential of all or several projects being out for maintenance at the same time.

- (h) Take or pay provision relating to curtailment. One major benefit of FiTs is providing certainty and stability to the project developer's revenue stream. To maintain this benefit, DBEDT believes that best designed FiTs encourage maximum utility energy purchases when curtailment is limited. Including a reasonable, cost-effective, and non-discriminatory curtailment provision with a sound basis such as technical system issues is justified. However, curtailment should not be based on utility economics or financial criteria known only to the utility. This take or pay provision may be reflected in the determination of the FiTs rates.
- (i) Delivery performance and penalty (or incentive). DBEDT believes that best designed FiTs may include a penalty or incentive provision for delivery performance, such as penalties for non-delivery for extended periods of time due to technical or operational issues that are within the control of the project as opposed to reasons caused by nature.
- (j) Treatment of the project's renewable energy credits (RECs). DBEDT's position is to count the renewable energy purchased by the utility through FiTs toward the utility's renewable portfolio standards, as agreed

to by the Parties to the Energy Agreement¹⁴. As such, REC ownership would be transferred to the utility.

DBEDT also does not oppose consideration of reflecting a reasonable value for the project's green attributes in the determination of the FiTs rates. Regardless, the FiTs design should clarify the ownership of RECs.

- (k) Periodic reporting by the utility. DBEDT recommends that the FiTs design incorporate an annual reporting requirement by the utility to the PUC, as well as an annual reporting requirement by the individual renewable producers to the utility.
- (l) PUC evaluation and update. DBEDT recommends that the initial FiTs be subject to an annual PUC evaluation and update during the initial 5 years, and every two years for the next ten years until the PUC deems the FiT design to be sound; in other words, until such time as the PUC deems that it has adjusted and addressed the "imperfections" in the initial FiTs design, and deems the FiTs program effectively achieving its intent in a cost-effective and efficient way. Additionally, any payment level provided to projects that start commercial operation in a specific year should not be adjusted retroactively. The FiT

¹⁴ Energy Agreement, October 20, 2008, item 9 at 18.

payment level should be clear and transparent over contract duration to provide policy certainty.

8. Eligibility Requirements:

Hawaii's initial feed-in tariffs should be extended to all proven, commercially available and cost-effective RPS-eligible renewable generation resources and technologies which have relatively established operational experience in the HECO Companies' service territories, including wind, solar, hydro, geothermal, biomass, and biogas. Future updates to the FiTs designs should consider extending FiTs to all RPS-eligible resources, and to relatively larger project sizes than the initial 5 MW recommended by DBEDT.

The other Parties'¹⁵ proposed tariff filed in their Opening Statements of Position indicated project sizes of up to 20 MW for most resources types, except for hydro where a project size greater than 50 MW was indicated. These project sizes merit consideration by the PUC in determining the future updates of the initial FiTs, especially as the utility grid systems are enhanced and upgraded as determined through the Clean Energy

¹⁵ The following Parties provided their proposed FiTs tariffs in their opening SOP: SOPOGY, HC&S, The Solar Alliance, HSEA, Clean Energy Maui LLC, Zero Emissions Leasing LLC, and Blue Planet.

Scenario Planning (CESP) to help integrate renewable generation in the system as agreed to in the Energy Agreement.¹⁶

9. Cost to consumers of the proposed feed-in tariffs:

Estimates of the cost impact of feed-in tariffs may be determined when the target amounts and FiTs rates are set. The cost impact should be compared with the benefits of implementing FiTs to promote and accelerate the increased development of renewable resources and attendant economic and environmental benefits of the reduction in Hawaii's oil imports. Cost impact calculations should also consider the risk of committing to additional investment in oil-based electricity generation over the lifetime of this facility both in terms of market and price volatility.

10. Whether or not the Commission should impose caps based on financial effects, technical limitations and other reasons:

DBEDT believes that instead of caps, the FiTs design should consider including a total target portfolio goal for each resource or technology type based on the determination of the most cost-effective resources allocation to achieve the statutorily mandated renewable portfolio standards (RPS). The total target portfolio goal for each resource may be set for each of the initial RPS years (i.e., 2010, 2015, 2020, 2030) rather than setting an annual target cap or goal.

¹⁶ Energy Agreement, October 20, 2008, items 25-27, at 30-32.

Alternatively, the HECO Companies' renewable resources commitments in the Energy Agreement may be used as target goals for the feed-in tariffs design.

If the Commission wishes to consider imposing caps, DBEDT's position is that the Commission may, in the initial FiTs design, include caps on the total annual installed capacity for costlier resources, in order to control the rate of deployment of marginally costlier resources and minimize ratepayer impacts, or until the FiTs rates are adjusted to more accurately reflect the resources costs.

DBEDT believes that the initial FiTs design should address the technical limitations in terms of project sizes rather than in terms of caps. DBEDT's recommended project sizes are discussed in detail in its positions relating to issues #3 and #7, above.

DBEDT does not recommend imposing caps based on assumed financial effects to the utility. The HECO/CA's joint response to Question 28 in Appendix C of the PUC's Scoping Paper filed on January 26, 2009, proposes that a FiT design limits the utility's liability under the FiT agreement to the amount that the utility recovers in its rates. This would be in lieu of the utility earning any return on power purchased through FiTs. Simply stated, the HECO/CA's joint FiTs design proposal is to limit or impose a cap on the total utility purchases through

FiTs to the amount that the utility is guaranteed cost recovery by the PUC.

This position in the HECO/CA joint FiTs design proposal is not aligned with the general tenets or principles of the Energy Agreement. As discussed above, the Agreement provided several significant utility incentives and regulatory mechanisms, subject to PUC approval, to address the utilities' financial barriers to aggressively promote and accelerate the use and development of renewable resources. The State is mindful of the potential impact of all those non-traditional incentives and regulatory mechanisms on the ratepayers, such that they can only be justified by the achievement of the significant commitments made by the HECO Companies in the Agreement. Among the incentives included in the Agreement is to allow the recovery of the utilities purchased power costs through a rate adjustment clause similar to the ECAC, subject to PUC approval.

The HECO/CA position for guaranteed cost recovery for the entire term of the FiTs agreement is inconsistent even with the current utility regulatory framework. Under that framework, the utilities are allowed but not guaranteed to earn a fair rate of return. DBEDT believes that this regulatory principle should continue to apply even with the implementation of the various incentives and regulatory mechanisms provided in the Agreement. This joint position also appears to abrogate the CA's oversight

role of the utilities and its consumer protection role. DBEDT does not believe that this guaranteed cost recovery requirement is a sound basis for use in the design of FiTs that is intended to support the achievement of the HCEI goal that is in the public interest.

11. Commission procedure for evaluating and updating renewable energy purchased power mechanisms or tariffs:

The initial FiTs adopted by the Commission should be evaluated annually for the initial 5 years. The evaluation process should include annual reporting by the utilities for each island to include the following without limitation: (1) number of applications received by resource type or technology and by project size, (2) status of each application received including the projects in the queues, (3) number of projects interconnected during the year, (4) amount of kilowatt-hours supplied to and purchased by the utility by project, (5) total purchased power costs by resource type or technology, and by project size paid during the year, (6) number and duration of curtailments by project and the reason for the curtailment, (7) cost and operational information reported by each project developer including actual project costs, profits, operation and maintenance costs, and (8) the percent of renewable generation to total generation in each island.

12. Administrative impacts to the Commission and the parties of the proposed approach:

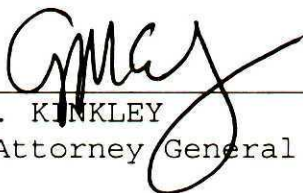
The estimated administrative cost to the PUC and the parties of the proposed approach will depend on the number of FiTs projects. To minimize the administrative costs, a streamlined reporting procedure should be prescribed including report forms and to the extent possible, such reporting should be done electronically.

CONCLUSION

In conclusion, best designed feed-in tariffs that incorporate DBEDT's position on the various issues addressed in the instant docket are effective tools in promoting and accelerating the addition of nonfossil-based generation in the HECO Companies' generation portfolio. DBEDT believes that this docket should aim at adopting the best designed feed-in tariffs given the current information available, and allow for periodic evaluation and review by the Commission and the relevant parties

as Hawaii gains experience in purchases of renewable energy under the initial feed-in tariffs resulting from this proceeding.

DATED: Honolulu, Hawaii, March 30, 2009.



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Certificate of Service

I hereby certify that I have served a copy of the Department of Business, Economic Development, and Tourism's Final Statement of Position including Proposals for Feed-in Tariffs Design, Policies, and Pricing Methods in PUC Docket Number 2008-0273, by electronic transmission on the date of signature to each of the parties listed below.

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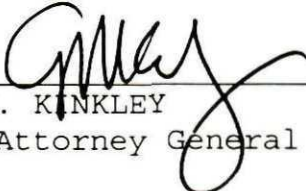
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